

investigation shall have been made. As elsewhere, embryology will give the best clue to its affinities. At present the type of Mollusca and that of Vermes seem both to claim *Neomenia* as a distant relation, the latter perhaps with more right than the former. *Neomenia*, however, presents considerable deviations from both, in the absence of a radula, in the structure of the alimentary canal and of the nervous system, as also in other respects, as the form of the body and the spines of the skin."

PROCEEDINGS OF LEARNED SOCIETIES.

GEOLOGICAL SOCIETY.

March 12, 1879.—Henry Clifton Sorby, Esq., F.R.S.,
President, in the Chair.

The following communications were read:—

1. "On Conodonts from the Chazy and Cincinnati groups of the Cambro-Silurian, and from the Hamilton and Genesee-Shale divisions of the Devonian, in Canada and the United States." By G. Jennings Hinde, Esq., F.G.S.

After a sketch of the bibliography of the subject, the author described the occurrence of Conodonts. In the Chazy beds they are associated with numerous *Leperditie*, some Trilobites, and Gasteropods; in the Cincinnati group with various fossils; and in the Devonian strata principally with fish-remains; but there is no clue to their nature from these associated fossils. They possess the same microscopic lamellar structure as the Russian Conodonts described by Pander. The various affinities exhibited by the fossil Conodonts were discussed; and the author is of opinion that though they most resemble the teeth of Myxinoid fishes, their true zoological relationship is very uncertain. The paper concluded with a classification of the Conodonts from the above deposits.

2. "On Annelid Jaws from the Cambro-Silurian, Silurian, and Devonian Formations in Canada, and from the Lower Carboniferous in Scotland." By G. Jennings Hinde, Esq., F.G.S.

After referring to the very few recorded instances of the discovery of any portions of the organism of errant Annelids as distinct from their trails and impressions in the rocks, the author noticed the characters of the strata, principally shallow-water deposits, in which the Annelid jaws described by him are imbedded. A description was given of the principal varieties of form and of the structure of the jaws. They were classified from their resemblances to existing forms under seven genera, five of which are included in the family Eunicea, one in the family Lycoridea, and one among the Glycera. The author enumerated fifty-five different forms, the greater proportion of which are from the Cincinnati group.

April 30, 1879.—Henry Clifton Sorby, Esq., F.R.S.,
President, in the Chair.

The following communications were read:—

1. "*Vectisaurus valdensis*, a New Wealden Dinosaur." By J. W. Hulke, Esq., F.R.S., F.G.S.

The author described some fossil remains, obtained by him in Brixton Bay, Isle of Wight, in 1871, consisting of an ilium, several pre-sacral, and one post-sacral vertebra. He established the Dinosaurian nature of the animal represented by them, and offered proof of its distinctness from already-known forms. He proposes for it the name *Vectisaurus valdensis*, a name descriptive of the locality and formation in which the remains were found by him. The characters presented by the genus *Vectisaurus* were stated to be as follows:—Ilium with a long compressed antacetabular process, having its greatest transverse extent in a vertical plane, and strengthened by a strong ridge produced from the sacral crest. Vertebrae in anterior dorsal region having opisthocœlous centres, their lateral surfaces longitudinally concave, transversely gently convex, meeting below in a blunt keel.

2. "On the Occurrence of the Genus *Dithyrocaris* in the Lower Carboniferous, or Calciferous Sandstone, Series of Scotland; and on that of a second Species of *Anthropalemon* in these Beds." By R. Etheridge, Esq., Jun., F.G.S.

The author, in the first place, referred to the extension of the range in time of the genus *Dithyrocaris*, by the discovery of numerous fragmentary remains of *D. testudineus*, Scouler, in the Calciferous Sandstone or Lower Carboniferous Series of the south of Scotland, about the horizon of the Wardie Shales near Edinburgh, and in the Cement-stone group of Roxburghshire.

A further and more complete description of *Anthropalemon Woodwardi*, Eth., jun., was then given, in which the characters of some of the appendages were more particularly alluded to, such as the eyes, inner and outer antennæ, and first pair of ciliate appendages, thus placing the stability of the species beyond a doubt.

The paper concluded with the description of a second species of *Anthropalemon*, from the Lower Carboniferous rocks of Roxburghshire, for which the author proposed the name of *A. Macconochii*, after the discoverer of the specimen. This remarkable species, of which the carapace is at present the only portion known, differs essentially in the characters of this part of the body from all the other described species of the genus.

MISCELLANEOUS.

Notice of a new Jurassic Mammal. By Prof. O. C. MARSH.

DURING a recent visit to the Rocky Mountains the writer spent some time in examining the deposits known as the Atlantosaur-